

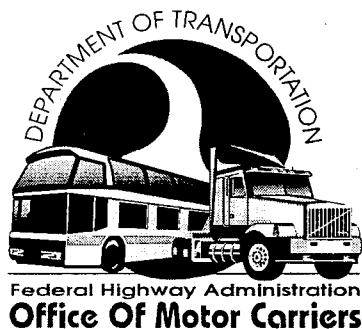


PB99-149742

# Peer Exchange on Hours-of-Service Compliance

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## Final Report



*Prepared for*  
Office of Motor Carriers  
Federal Highway Administration  
*by*  
Upper Great Plains Transportation Institute  
North Dakota State University

August 1997



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16. Abstract <p>The Peer Exchange is a process adopted by the Office of Motor Carrier and Highway Safety (OMCHS) in which teams of professional, representing state and federal government identify effective commercial motor vehicle (CMV) safety programs and document their findings of "best practices" for implementation by other jurisdictions throughout North America.</p> <p>This report documents the findings of the National Peer Exchange on Hours-of-Service (HOS) compliance that was conducted by a team of State and Federal motor carrier safety delegates. The report identifies States' best practices in the area of HOS compliance observed during site visits to 11 States during 1996. States' best practices are categorized into seven key elements fundamental to an effective HOS compliance program and further described in the report chapters:</p> <p>(1) program management; (2) roadside enforcement; (3) compliance reviews; (4) training; (5) data analysis; (6) technology; (7) industry outreach.</p> <p>The information on States' best practices presented in this report should be considered as tools States may want to use to strengthen their program. These tools range from simple roadside practices by field personnel to effective training programs and management strategies. The decision of which practices to choose is entirely up to the State, since each State will have varying organizational structure, levels of resources, and critical safety issues.</p>					
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Final Report*

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The peer exchange team wishes to acknowledge the assistance of the States which participated in the peer exchange, especially those that arranged for site visits. Numerous individuals provided valuable insights into Hours-of-Service compliance, shared their experiences with the peer exchange team, and provided the team with an open and welcoming atmosphere to learn about their programs.

Special thanks go to Shelley Sundvor, Travel Consultant with AAA First International Travel in Fargo, for making all the travel arrangements related to the peer exchange; Kathy McCarthy, Administrative Assistant at the UGPTI, for assisting in travel planning and billing; Bev Trittin, Visual Communication Specialist at the UGPTI, for assisting in preparing the reports, data forms, and other artwork; and finally Shelly Glatt, Administrative Secretary at the UGPTI and Renita Hamlet, Transportation Assistant, Office of Motor Carriers, State Programs Division, for their assistance in the project.

### **Disclaimer**

The contents of this report reflect the views of a peer delegation of State and Federal representatives based on observations and interviews during 11 State visits. These findings are representative of the practices found in the States visited. There may be other best practices in those States that were not visited.





U.S. Department  
of Transportation

**Federal Highway  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

Refer to: HSA-30

August 1, 1997

Dear Colleagues:

The States of Arizona, Colorado, Florida, Kansas, Maryland, Nebraska, North Dakota, Utah, and Washington, in partnership with the Office of Motor Carriers, have successfully completed a second national peer exchange on an important Motor Carrier Safety Assistance Program (MCSAP) safety topic, "Hours-of-Service Compliance." Enclosed is the final report on the "best practices" found in the States visited. These practices are categorized into seven key elements fundamental to an effective hours of service compliance program: (1) program management, (2) roadside enforcement, (3) compliance reviews, (4) training, (5) data analysis, (6) technology, and (7) industry outreach. I encourage you to read this report and incorporate those initiatives that are adoptable and most likely to benefit and improve the hours-of-service enforcement program within your State.

States are also encouraged to evaluate their current hours-of-service enforcement activities to establish performance baselines, and, after incorporating appropriate "best practices" contained in this report into your program, analyze the effectiveness of these practices against the established baselines within your program.

The peer exchange process has proven to be an effective technique to share, develop, and bring more problem solving creativity among states to address important safety issues. Further, we have found it to be an excellent opportunity for State and Office of Motor Carriers staff to broaden their expertise in many aspects of program management, as well as to build a network of partnerships needed to pursue the goal of safety and reducing crashes.

My sincere thanks and appreciation for a job well done to the peer exchange team, the host State agency, North Dakota State Patrol, the Upper Great Plains Transportation Institute of the North Dakota State University, and all of you who hosted and participated as site-visit States.

Sincerely yours,

George L Reagle  
Associate Administrator  
for Motor Carriers

Enclosure



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# ***EXECUTIVE SUMMARY***

This report documents the findings of the National Peer Exchange on Hours-of-Service (HOS) Compliance that was conducted by a team of State and Federal motor carrier safety delegates. The report identifies States' best practices in the area of HOS compliance observed during site visits to 11 States during 1996. States' best practices are categorized into seven key elements fundamental to an effective HOS compliance program and further described in the report chapters:

- 1) program management
- 2) roadside enforcement
- 3) compliance reviews
- 4) training
- 5) data analysis
- 6) technology
- 7) industry outreach

The information on States' best practices presented in this report should be considered as tools States may want to use to strengthen their program. These tools range from simple roadside practices by field personnel to effective training programs and management strategies. The decision of which practices to choose is entirely up to the State, since each State will have varying organizational structure, levels of resources, and critical safety issues.

It should be noted that this executive summary provides an overview of the team's findings and some examples of best State practices. For a full description of these practices, the reader should refer to the respective chapters in this report.

## ***1. Program Management***

The first and foremost key element for effective HOS compliance starts at the program management level. Some of the States' best practices identified during the peer exchange may be classified into the following:

- 1.1 Clear understanding of the goals* of the State motor carrier safety program by the relevant agencies and their units, shared at all levels of the agency.
- 1.2 Allow flexibility* in the organizational scheme in the agency to target local, district, and regional issues, while ensuring consistency across all locations in the State.
- 1.3 Develop a responsive and well-balanced program* focusing on critical safety issues, which maximizes the use of available resources and has the right mix of enforcement activities related to weighing commercial vehicles, and conducting the most appropriate types of safety inspections.
- 1.4 Support data collection* to ensure the required information is gathered and processed in an accurate and timely fashion.

- 1.5 *Coordinate with other State and Federal agencies*, including enforcement activities, training of officers, and sharing of information and data.
- 1.6 *Cooperate and coordinate with the Federal OMC* to ensure consistency of motor carrier safety programs and optimize the use of resources.
- 1.7 *Cooperate and coordinate with Legislative and Judicial branches* to support consistent intrastate HOS regulations, more effective case procedures, and a higher rate of successful outcomes.
- 1.8 *Support open communications* in the agency to ensure achievement of program goals, encourage team spirit, and promote high morale among personnel.
- 1.9 *Personnel support* from upper management to build the confidence and motivation necessary for effective performance in enforcing motor carrier safety regulations, as the focus of the program should be on quality not quantity.

## ***2. Roadside Enforcement***

Roadside enforcement activities constitute a major element of HOS compliance. States' best roadside enforcement practices can be organized as follows:

### ***2.1 Management Philosophy***

These practices pertain to management decisions, which guide the mission of the enforcement program and outline its functions and operations:

- a. A good management approach was to develop a well-balanced inspection program, which emphasizes Level III inspections.
- b. Ideally, all enforcement officers who are properly trained should conduct Level III inspections and participate in the HOS compliance program.
- c. Assure quality inspections by providing officers with adequate training, adequate time, necessary technological tools to complete the inspections, and by encouraging officers to treat drivers with respect and dignity.

### ***2.2 Adequate training***

Training was found to be a key element in the success of roadside HOS enforcement as it affects the level of competence, comfort, and confidence of officers, and greatly impacts the quality of the inspections. Some of the States' best practices include the following:

- a. Officers trained in interview techniques to effectively obtain and process information from the driver, the record of duty, and other sources.
- b. Through formal and informal training, officers were exposed to additional sources and methods for collecting information on the driver or the trip.

- c. Officers receive training, including periodic refreshers or in-service training, in motor carrier safety regulations and any changes in regulations.
- d. Officers receive training on the motor carrier industry and local and regional carriers and their practices, including most common commodities and routes.

### *2.3 Interview techniques*

A good interview was found to be key to an effective driver inspection, and is achieved by:

- a. Building strong interview skills among officers through proper training and experience.
- b. Using the open questions techniques to encourage the driver to participate.
- c. Observing the driver's actions and non-verbal clues.

### *2.4 Information gathering*

There are numerous sources of additional information officers can obtain through interviews and examination of supporting documents. Key sources include:

- a. The trip packet and other documents, such as receipts for fuel, food, tolls, motel, and other services.
- b. Telephone interviews with service stations, the motor carrier dispatch, shippers, and other enforcement locations.
- c. Maps and computer software (PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker<sup>®</sup>) to verify mileage and travel times.

### *2.5 Technology/equipment/tools*

Technology plays a growing role in enabling State and Federal MCSAP agencies to accomplish their missions effectively and efficiently. The use of technology to support roadside enforcement activities may be classified by function into:

- a. Selecting drivers and vehicles for inspection using the Inspection Selection System (ISS), radar, radar detector detectors, CB radio, and other available information, such as inspection station clearance forms.
- b. Estimating trip travel times and distances using computer programs, maps, road atlases, distance tables, and gathering information using telephones, cellular phones, fax machines, and computer systems.

### *2.6 Selection process*

Several practices for selecting commercial vehicle drivers for roadside inspections were observed in the field. These practices range from random selection to the use of computer systems, such as the ISS. The officers' familiarity with the area (types of shipments and carriers) and drivers' actions also influenced the selection.

### *2.7 Coverage*

- a. Vary the shift assignments at fixed sites and mobile units to concentrate on areas of potential violators.
- b. Data analysis is increasingly used to identify the most effective roadside enforcement locations (i.e., using crash and inspection data to target problem areas).
- c. Several States cooperate in joint enforcement efforts to target a wider geographical area.

*2.8 Penalties* make up an integral part of the roadside enforcement program. One of the key requirements is consistency of fines in all jurisdictions in the State. In addition, some State laws (Florida, Maryland, Pennsylvania, and Wyoming) allow issuing violations directly to the motor carrier as a result of a roadside contact.

### *2.9 Innovative Practices*

During the site visits, the team learned about several other roadside practices that were not listed in the above categories. In many instances, these practices resulted from personal initiative by officers or other personnel to improve the roadside inspection process, such as developing special forms or modifying existing forms for driver inspections.

## **3. Compliance Reviews**

Compliance reviews (CRs) are an integral part of an HOS compliance. They support roadside enforcement and provide educational contacts and outreach to motor carriers. The information observed during the site visits is arranged according to its role in the compliance review process in the following elements:

### *3.1 Management Philosophy*

A successful compliance review program requires that management recognizes the importance of compliance reviews, dedicates adequate resources (personnel and equipment) for the program, and works closely with the OMC.

### *3.2 Selection*

Use a priority list to target motor carriers for CRs, similar to the Selective Carrier Enforcement (SCE) list used by the OMC. CR's were also conducted after major crashes involving commercial vehicles. As part of a pilot project in Utah, motor carriers with repeated roadside HOS violations are targeted with CRs.

### *3.3 Information Gathering*

These practices refer to the procedures used in preparation of the CR to obtain information on the safety of the motor carrier and any previous violations or enforcement actions. Officers use available information from all sources, including Safetynet, major crash investigations, roadside inspections, and the OMC.



### *3.4 Procedures*

These practices refer to all activities related to conducting the compliance review, from the time of deciding to review a motor carrier to the time of concluding the review. The States visited in the peer exchange had well-organized processes, including detailed steps and forms for conducting the CR. Examples of these procedures are provided in Chapter 3 of this report.

### *3.5 Penalties*

Some of the key States' best practices include: consistency in the penalty structure, additional penalties (e.g., Arizona, officers may seize registration of all vehicles owned by the motor carrier), and coordination with the prosecuting attorney's office and the Department of Motor Vehicles.

### *3.6 Technology*

Several pieces of equipment and systems are used by officers during the compliance review, including laptop computer-based CR programs, routing/mapping software (PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker<sup>®</sup>), reference software for motor carrier regulations (MCREGIS), and document scanners to collect evidence.

## **4. Training**

The peer exchange team concluded that training is the most fundamental element in an effective HOS compliance program. The level and amount of training had a profound impact on all other elements of the HOS compliance program. In particular, the success of the HOS program areas that involve direct contact with commercial drivers and motor carriers (roadside inspections and CRs) is directly dependent on adequate training.

There are several issues related to training, such as level of training, frequency and timing of training, types of information provided, and the format or mechanism of the training. Some of the highlights of the States' best training practices are briefly discussed below (a full discussion is provided in Chapter 4).

- a. Training should be an on-going process that ideally combines classroom and hands-on and/or on-the-job training.
- b. Consistency of the training activities in the State through coordination between the lead MCSAP agency and other Federal and State agencies.
- c. Initial training provides at least the minimum skills and knowledge required to enforce motor carrier safety regulations, including the basic elements of motor carrier safety regulations, interview techniques, information gathering techniques, and technology. At a minimum, officers receive the basic HOS element of the 40-hour North American Standard course.
- d. It is important to provide an opportunity for trainees to develop a level of comfort in the field, achieved by working with experienced officers.
- e. Some States provide specialty training to their officers to respond to their special needs or enhance the officers' performance in HOS enforcement.

## ***5. Data Analysis***

There is a strong move at the OMC and State MCSAP agencies toward performance-based programs, where decisions are supported by proper data analysis. The peer exchange team feels that proper analysis of data from all sources at the Federal and State levels (e.g., Safetynet, FARS, TIFA) is essential for effective program management, developing enforcement plans, targeting problem areas and carriers, and making the best use of available resources. Chapter 5 of this report identifies data analysis uses observed during the peer exchange.

## ***6. Technology***

Technology will continue to play a major role in enhancing motor carrier safety programs, increasing productivity, and bridging the transition to performance-based MCSAPs. Several national initiatives, such as Intelligent Transportation System applications to Commercial Vehicle Operations (ITS-CVO), will impact the role of enforcement agencies as there is more reliance on information. These agencies should keep up-to-date of new issues associated with new technology.

### ***6.1 Computer Equipment***

The use of computers is increasing rapidly, especially among field personnel at fixed and mobile sites. Computer systems are used for conducting inspections, entering data, uploading data, accessing information databases, and using specialized software. Typically, fixed site inspection stations are provided with desktop computers while mobile units use laptop computers, both with modems and printers.

### ***6.2 Software Applications***

Several software programs are used by officers to assist in their activities. Routing programs are used to verify distance, travel time, and speed (PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker<sup>®</sup>). The Inspection Selection System (ISS) is used to select vehicles for inspection. Officers use ASPEN to complete and enter inspections into laptop computers. These programs are summarized in Chapter 6 of this report.

### ***6.3 Other Equipment, Tools, and Resources***

Several tools and other equipment are used by officers in the field to support HOS inspections. Telephones, cellular phones, and fax machines are used for information gathering to verify driver record-of-duty entries and exchanging information with other inspection sites. Radar, and radar detector detectors are used to select drivers for inspection. Maps, road atlases, toll booth maps, calculators, and Log Checker<sup>®</sup> are used for estimating travel distances and times.

## ***7. Industry Outreach***

Industry outreach is an integral part of an effective HOS compliance program. Federal and State agencies share a common goal of improving safety with the motor carrier industry. That goal is achieved more effectively through strong partnerships between motor carriers and State and Federal agencies. Close cooperation and coordination result in a productive exchange of ideas and information that will result in voluntary compliance and contribute to safer highways.

State and Federal agencies, working with motor carrier groups, have developed several mechanisms and activities to increase motor carriers' awareness of safety. These activities range from holding regular meetings with industry groups and participating in industry meetings, to answering special training and information requests by motor carriers. Chapter 7 of this report documents several outreach programs observed during the peer exchange.



# *INTRODUCTION*

---

This is the final report of the National Peer exchange on Hours-of-Service (HOS) Compliance. The North Dakota Highway Patrol acted as the host State agency for the peer exchange. The Upper Great Plains Transportation Institute at North Dakota State University acted as a consultant to facilitate the peer exchange.

This report documents information collected by a team of Federal and State motor carrier safety specialists from 11 States during site visits to 12 States in 1996. The information contained in this report provides valuable insights to various Federal and State agencies and the motor carrier industry on key elements of a successful HOS compliance program.

The information presented in this report may not be suitable or applicable in every State. The reported State practices should be considered as tools States may want to use to strengthen their program. The decisions of which practices to implement is entirely up to the State since each State will have a different motor carrier safety agency organization structure, different levels of funding and human resources, and different critical safety issues. However, some of the practices observed during the peer exchange do involve changes in the agency management philosophy and its motor carrier safety program, as can be seen in the following sections.

This chapter provides a brief overview of the study by: 1) describing the background for selecting HOS compliance for the second National peer exchange, 2) discussing the peer exchange process, 3) discussing the major HOS compliance program elements used for categorizing the collected information, 4) introducing the peer exchange team, 5) describing the locations and schedule of State visits, and 6) describing the organization of the information in the remainder of this report.

It should be noted that interim reports were prepared at the conclusion of site visits. These reports offer information about the States' site visits and may be obtained through the Upper Great Plains Transportation Institute, North Dakota State University, P.O. Box 5074, Fargo, North Dakota 58105 or calling the UGPTI at (701) 231-7767.

## *Justification*

Safety, as it relates to commercial motor vehicles, continues to be an important national issue. Highway safety in general receives a great deal of attention from government agencies, private sector organizations, and the general public. Highway fatalities are the seventh leading cause of deaths in the U.S. Although commercial vehicles are involved in only a small portion of the total number of fatal crashes, these crashes continue to be highly visible, especially among the public. This high visibility requires prompt and effective programs and policies by Federal and State transportation and enforcement agencies.

Analysis of crash data reveals that human factors are the most frequently cited crash contributing factors. Driver fatigue is the predominant driver factor in crashes not involving alcohol. Federal Motor Carrier Safety Regulations (FMCSR) address the commercial vehicle driver fatigue problem through Hours-of-Service (HOS) rules. According to Federal rules in Title 49 CFR section 395.3, the maximum driving and on-duty time is restricted to: 1) 10 hours driving time following 8 consecutive hours off duty; 2) 15 hours on-duty following 8 consecutive hours off duty, and 3) 60 hours on-duty time in any 7 consecutive days or 70 on-duty hours in any 8 consecutive days, depending on the motor carrier's weekly operating schedule. Commercial drivers are required (except when exempt) to carry log books and maintain an accurate and up-to-date account of their activities. Motor carrier safety officers use the entries in the log books and other information to ascertain that commercial vehicle drivers are operating within the legal limits. However, HOS violations remain a significant problem across the nation.

Recognizing driver fatigue as a critical motor carrier safety issue, the OMC convened a national peer exchange to focus on HOS compliance.<sup>1</sup> The mission of the peer exchange was to identify best HOS compliance practices as they are applied in selected States by State and Federal agencies to be shared with all relevant parties.

### ***Peer Exchange Team***

The peer exchange team consisted of motor carrier safety experts from Federal and State agencies. These individuals were collectively responsible for accomplishing the mission of the peer exchange by collecting and analyzing relevant information throughout the study to identify best practices. In addition, they were involved in planning the peer exchange team to visit their States. The members of the peer exchange team and their telephone numbers listed alphabetically are:

Paul Alexander, State Programs, OMC, Washington, D.C.	(202) 366-9579
Mark Bethke, North Dakota Highway Patrol	(701) 328-2455
Ed Boring, Kansas State Patrol	(316) 331-5291
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Dan Folstad, Commercial Vehicle Safety Alliance (partial participation)	(301) 564-1623
Steven Groshans, Nebraska State Patrol	(402) 471-0108
Shirleen Hancock, Utah Department of Transportation	(801) 965-4781
Bruce Holmes, Utah OMC Division	(801) 963-0096
Barbara Kenefake, State Programs, OMC, Washington, D.C.	(202) 366-9579
Gerald Krolikowski, Nebraska State Patrol	(402) 471-0108
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John Pitzer, Colorado State Patrol	(303) 239-4656
Craig Powell, Washington State Patrol (Alternate)	(360) 753-0289
Ronald Prematta, Maryland State Police (Alternate)	(410) 642-6880
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Don Taullie, Colorado State Patrol (Alternate)	(303) 239-4656
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Keith Westphal, Florida Department of Transportation	(561) 433-2670

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<sup>1</sup> For more information contact Paul Alexander/Barbara Kenefake at the OMC, (202) 366-9579.

## ***State Visits***

From the 11 States represented on the peer exchange, the delegates selected the following States for site visits: Arizona, Colorado, Florida, Maryland, Nebraska, North Dakota, Pennsylvania, Utah, Washington, and Wyoming. In addition, some elements of HOS compliance programs from Idaho, Minnesota, New York, and Virginia were presented during scheduled visits to North Dakota, Pennsylvania, and Washington. After learning more about the Iowa Core Traffic Enforcement program, a partial group of the peer exchange team made a site visit to Iowa after finishing all other State visits. The final schedule for the State visits was as follows:

Arizona	February 6
Florida	March 26
Pennsylvania/Maryland	April 22
Washington	May 21
Colorado/Wyoming	June 24
North Dakota/Minnesota	August 27
Nebraska	September 9
Utah	October 15
Iowa	October 29

A final meeting was held in December 1996 to finalize the findings and best practices from the peer exchange. During the meeting, the team reviewed the information collected from the different States and discussed how that information could be presented. After three days of discussions, the team finalized the content of the final report and suggested methods to disseminate the findings.

## ***HOS Compliance Elements***

To facilitate the collection and documentation of information from the site visits, the team identified seven major elements of HOS compliance, based on the various activities of Federal and State agencies. These elements may be described as follows:

1. Program management
2. Roadside enforcement
3. Compliance Reviews
4. Training
5. Data analysis
6. Technology
7. Industry outreach

Program management refers to activities and issues related to the overall goals, procedures, and policies in regard to HOS compliance. This includes lead agency issues, organizational structure in the agency, management philosophy, resource allocation, and relationship with other Federal and State agencies. The information pertaining to program management is summarized in Chapter 1 of this report.

Roadside enforcement refers to all activities relevant to conducting safety inspections on commercial motor vehicles and drivers. Special emphasis is given to

Level III inspections, which focus primarily on the commercial driver. These activities include the selection of drivers and vehicles for inspection, the types of interview techniques used by the officers, additional information gathering, technology and equipment used during the inspection, and other inspection-related practices. These activities are described in Chapter 2 of this report.

Compliance reviews work hand in hand with roadside enforcement to achieve an effective enforcement program. Various activities ranging from the selection of motor carriers for a compliance review to the administrative procedures governed by State laws are covered under this category. The information pertaining to compliance reviews is summarized in Chapter 3 of this report.

Training could be the most significant element of a successful HOS compliance program. Training affects how the program is executed at all levels and in various areas of enforcement activities. Practices related to training will cover the type and level of training for various personnel, the type of information provided in training, the methods of providing the training, the frequency of providing training, and the responsibility of providing the training. Chapter 4 of this report addresses States' best training practices.

The fifth element of HOS compliance is data analysis, which includes all activities, methods, and systems used to support an effective program. Data analysis and performance-based measures are integral parts of the Strategic Plan of the Office of Motor Carriers (OMC) to identify critical issues and guide commercial vehicle safety programs. Similarly, data analysis is a crucial element to support an HOS compliance program in providing decision support for management and targeting critical safety issues and areas as discussed in Chapter 5.

The sixth element of HOS compliance activities is the use of advanced technologies to increase the effectiveness of motor carrier safety programs. Technology will continue to play a significant and growing role in all areas of transportation services and elements in the public and private sector. The use of cost-effective advanced technologies is key to the success of motor carrier safety programs, especially during an era of constrained financial and staff resources. Some of the technological issues related to HOS compliance include the use of computer systems and specialized software for enforcement and data collection activities, the use of monitoring equipment, document scanners, and advanced communication systems, as shown in Chapter 6 of this report.

Last, but not least, industry outreach plays a crucial role in supporting motor carrier safety activities, including HOS compliance. Federal and State motor carrier safety agencies recognize the importance of establishing and strengthening partnerships with the motor carrier industry to achieve safety goals. Various training, educational, and outreach activities relevant to HOS compliance are discussed in Chapter 7 of this report.



# 1

## ***PROGRAM MANAGEMENT***

---

Program management is an important element in HOS compliance, which impacts all other program areas. The success of an HOS compliance program can only be achieved with effective organization goals and policies based on critical issues, strong support from upper management, open communication channels in the organization, and coordination and cooperation with other State and Federal agencies. The following sections will illuminate States' best practices classified under program management that were observed to have a positive impact on HOS compliance. Best practices classified as a group are designated with a heading starting with the chapter number. Examples of specific States' best practices under one group are designated by letters.

### ***1.1. Clear Understanding of Goals***

The organizational structure within the lead MCSAP agency and other motor carrier safety agencies has a great impact on the effectiveness of the HOS compliance program. One of the major attributes observed in successful programs was a clear understanding of the mission of the State's program and its goals by the relevant agencies and their units. This understanding cuts across organizational lines and is shared by all levels of the agency, from the upper management to the field personnel.

- a. Management ensures consistency in all program elements and among all the participating State and Federal agencies.
- b. Management provides field officers with feedback on how the program is meeting its goals.

### ***1.2. Flexibility***

A good organization structure assures consistency across all locations within the State, while allowing enough flexibility to target local issues at the district or regional levels. The flexibility afforded to districts and field personnel, particularly in enforcement activities, allows a level of specialization, which makes most effective use of available resources and talents.

- a. The Iowa State Patrol uses a CORE group of specialized officers to maximize the effectiveness of its traffic enforcement program. These officers are distributed among the different districts to coordinate commercial vehicle enforcement activities within their district.

- b. Management allowed and encouraged specialization by individual officers to develop an enforcement area they are comfortable with and competent in.
- c. Field stations have enough flexibility in setting their specific operations, but stayed within the broad program goals.

### ***1.3. Responsive, Well-balanced Program***

The driving force of management support and recognition of the importance of HOS compliance stems from a full recognition of key critical motor carrier safety issues. It is paramount to develop a well-balanced program that is responsive to critical safety issues in the State to target high priority issues and areas and maximize the use of available resources. The identification of critical safety issues must be based on thorough and accurate analysis of inspection and crash data. For example, since safety data identify driver fatigue as a major contributing factor to commercial vehicle crashes, an effective approach is to increase the focus on the driver, i.e., Level III inspections.

This issue becomes more critical when there is a need to balance several goals within the agency. For instance, State DOTs must protect the substantial investments in the road system and prevent illegal use (overweight vehicles). When the State DOT is also the lead MCSAP agency, it has an added role to enforce motor carrier safety regulations. Therefore, a well balanced program should have the right mix of enforcement activities related to weighing commercial vehicles and conducting safety inspections.

- a. Management recognizes the importance of HOS compliance and gives it a greater focus in its program, including a balance of Level I and III inspections.
- b. Conduct analysis of Safetynet data on a regular basis to identify problems and determine high priority activities and locations.

### ***1.4. Support Data Collection***

The identification of critical safety issues and problem areas should be based on thorough and accurate analysis of safety inspection and crash data. These analyses will allow program managers to optimize the use of their resources to make the most contribution to improving safety. To achieve this capability, upper management must support data collection activities to ensure the required information is gathered and processed in an accurate and timely fashion. Further, management, recognizing the importance of data collection, should allocate adequate resources and support the use of technology for data collection systems.

### ***1.5. Coordination/Cooperation***

The organizational scheme of motor carrier safety functions in each State usually includes several agencies. The lead MCSAP agency plays a leadership role in coordinating and managing program activities, including those related to HOS compliance. This ensures consistency within the State and that all opportunities are utilized to improve motor carrier safety. These activities include consistent enforcement activities, training of officers, and sharing of information and data.

- a. Good cooperation and coordination among the lead agency and other agencies.
- b. One agency within the State coordinates the training and certification of all officers who conduct commercial vehicle enforcement (Colorado, Maryland, Washington, and Wyoming).
- c. Cooperate in developing programs, training, and sharing resources among all agencies involved in motor carrier safety. For example, specialized city and/or county enforcement units (in UT and WA) assist in overall HOS program.

### ***1.6. Work with the Federal OMC***

Another important element to an effective HOS compliance program is a close working relationship with the Federal OMC. Effective coordination between State and Federal programs ensures consistency of motor carrier safety programs and optimizes the use of resources. In addition, since many motor carriers have interstate operations, a strong State and Federal partnership extends enforcement activities to carriers domiciled outside a particular State.

- a. Management encourages a good relationship with the OMC in their State and other States.
- b. State and Federal personnel work closely to target problem carriers through coordinated roadside enforcement and compliance reviews.
- c. Report roadside violations of motor carriers, who do not comply, to the OMC for possible enforcement and/or follow-up action.
- d. Federal personnel develop and teach training programs in coordination with their State counterparts.

### ***1.7. Work with Other States***

Cooperation and coordination also extend to other States. Interstate and regional cooperation in the area of HOS compliance has several applications in enforcement activities and exchanging information. Better information will assist in the identification of HOS violations and in targeting violators. The exchange of information also extends to selecting problem carriers for compliance reviews. Further, States can learn from each other's experiences in developing and delivering effective training programs.

- a. Participate with other State and Federal agencies in Log Book Surveillance Pilot Project (Idaho, Montana, Oregon, Utah, and Washington).

### ***1.8. Work with Legislative and Judiciary Branches***

Effective coordination assures an acceptable level of motor carrier safety awareness among Legislative and Judicial Branches and the private industry. To achieve consistent intrastate HOS regulations, it is important to provide the legislative body with adequate information about motor carrier safety issues in the State and familiarize them with

problem areas. Similarly, since motor carrier safety violations could result in court cases, States that have Judicial Outreach Programs experienced more effective case procedures and a higher rate of successful outcomes. In some States, officers took the initiative to invite judges to inspection sites and explained the procedures and equipment used. Other States worked closely with the Attorney General's Office to develop an effective administrative process for motor carrier cases resulting from CRs.

- a. Judicial Outreach Program aided prosecution efforts for HOS compliance cases.
- b. Officers periodically invite judges to watch inspections to familiarize them with procedures and equipment used, i.e., PCMiller (Nebraska and Pennsylvania).

### ***1.9. Open Communications***

A management approach that fosters open communication channels within the agency assures achievement of program goals, encourages team spirit, and promotes high morale among personnel. It is important to receive and encourage feedback from all personnel on how the program is working to recognize potential problems early on. Open communications also will yield valuable insights from field personnel on critical safety issues, the difficulties faced in the field, and the required resources and equipment. In turn, field personnel are provided with feedback on how the program is meeting its goals.

- a. Results from Safetynet analysis are shared with officers on a regular basis to inform them on how the program is meeting its goals.
- b. Hold regular meetings with field officers.
- c. Upper management have good understanding of resources and equipment needs at the field level.
- d. Open communications among field personnel and management assist in assessing how the program is meeting its goals.

### ***1.10. Personnel Support***

The support of upper management to field officers builds the confidence and motivation necessary for effective performance. The focus of the program should be on quality not quantity in meeting program goals. The support of upper management also ensures that adequate resources and training are provided to officers in order for them to conduct their duties effectively and efficiently.

- a. Upper management supports field officers which in turn provides them with great confidence and flexibility in enforcing regulations.
- b. Management fosters high morale among officers.
- c. Management's approach emphasizes quality not quantity. No limit is set on the amount of time officers spend conducting inspections.

- d. Officers work well as a team and do not hesitate to ask for help.
- e. Management provides positive feedback and encouragement to field personnel and recognizes exceptional performance.

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*Additional Resources/Contacts*

- ☞ For information on the CORE group, contact Lt. Thomas Gabriel from the Iowa State Patrol at (515) 281-4985.
- ☞ For more information on the Log Book Surveillance Pilot Project, contact Washington State OMC Division Office, (360) 753-9875.
- ☞ For more information on the Judiciary Outreach Program (JOP), contact Deborah Snider at (202) 366-2941 or Paul Alexander at (202) 366-5881 from FHWA, OMC.



# 2

## ***ROADSIDE ENFORCEMENT***

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Roadside enforcement activities constitute a major element of HOS compliance. Roadside enforcement refers to all inspection activities conducted by officers on the commercial vehicle or driver, including inspections stemming from traffic stops and inspections at mobile and fixed sites. These activities ensure HOS compliance through direct contact with commercial vehicle drivers and provide an opportunity for raising awareness among commercial drivers.

Extensive information was collected by the peer exchange team during site visits by observing and interviewing officers and drivers, and through discussions with program managers. As a result, the peer exchange team identified several key components to classify States' best practices. They include: management philosophy, training, interview techniques, information gathering, the use of technology, selection process, coverage, penalties, and innovative practices. These components are discussed in detail in the following sections.

### ***2.1. Management Philosophy***

These practices pertain to management decisions that guide the mission of the roadside enforcement program and outline its functions and activities. They answer the broad questions of what inspections are conducted; who conducts these inspections; and when, where, and how these inspections are conducted. In addition, these decisions impact the type and level of training provided to field personnel as well as the equipment and support provided for roadside enforcement activities.

One of the most critical management decisions is the distribution of enforcement efforts among the various types of inspections. A successful HOS compliance program requires a well-balanced inspection program, which emphasizes Level III inspections. Management has the major role in ensuring a strong focus on HOS compliance. As a result, the management encourages Level III inspections and provides the staff, training, and equipment necessary to conduct quality Level III inspections.

- a. Develop a well-balanced enforcement program, which emphasizes Level III inspections.
- b. Coordinate roadside enforcement and compliance reviews.
- c. Management provides an effective training program that produces confidence and a high level of comfort among officers to conduct quality inspections.

- d. Adequate space at the inspection station facilitates the work of the officers.

The level of resources available for supporting roadside HOS enforcement is greatly enhanced by sharing resources from other units. Ideally, all enforcement officers, who are properly trained, should conduct Level III inspections and participate in the HOS compliance program. Raising the level of awareness among road troopers and other officers and providing them with adequate training and incentives, in turn develops a stronger interest in conducting Level III inspections and greater participation.

- e. Ideally, all properly trained enforcement officers conduct Level III inspections and participate in enforcing HOS regulations during regular traffic stops.
- f. Level III certification program for cadets provides an enforcement resource for HOS compliance (i.e., Maryland).
- g. New troopers are required to conduct Level III inspections during their probation period by working with experienced officers (Arizona, Pennsylvania, Maryland).
- h. Encourage Level III inspections in conjunction with all commercial motor vehicle traffic stops.
- i. During field training period, probationary officers are required to complete a certain number of inspections before being released from probation.
- j. Motor carrier officers should assist in commercial vehicle crash investigations.

Management philosophy also impacts the quality of inspections in the field. When officers are properly trained, they are more confident about their duties and more eager to do the job. Officers perform better when they are not pressured to conduct a certain number of inspections and are allowed adequate time to complete inspections. The performance of officers is further enhanced when they used technology, such as computers, specialized software, and communications systems. Finally, a goal of management should be for officers to consistently treat drivers with courtesy and respect during inspections.

- k. Allow officers adequate time with the driver during enforcement contacts.
- l. As a general rule, supervisors should make contact with officers daily.
- m. Periodically work outside normal locations and hours (shift assignments), which sparks more interest from officers and exposes them to new issues and violators.
- n. Special details help facilitate group communications (Iowa State Patrol).
- o. Treat drivers with dignity and courtesy.



## 2.2. Training

Training was found to be the key factor for effective roadside HOS enforcement. Training affects the level of competence, comfort, and confidence of officers, which greatly impact the quality of the inspections. Chapter 4 of this report is dedicated to covering training programs observed during the States' visits. However, the following information pertains directly to training elements related to roadside enforcement.

- a. *Interview techniques.* It is imperative that officers be properly trained in interview techniques. HOS inspections require extracting and processing extensive information from the driver, the log book, and other sources. Through effective interview skills developed by specialized training and experience, officers are able to identify falsifications in driver's record of duty.
- b. *Gathering additional information.* Through formal and informal training, officers are exposed to additional sources and methods for collecting information on the driver or the trip. These include calling fuel stations, shippers, other enforcement sites in the State and in other States, and toll authorities; using computers and computer software such as routing programs (i.e. PCMiller,<sup>®</sup> Automap,<sup>®</sup> and Trip Maker<sup>®</sup>); and using the trip packets and any receipts or paper work, which provide date, location, and time information.
- c. *Knowledge of regulations.* Complete knowledge and understanding of interstate and intrastate motor carrier safety regulations, especially those pertaining to HOS rules are key to effective enforcement contacts. Officers who receive proper training, including periodic refreshers or in-service training, and are informed of any changes in regulations, are more effective in identifying potential violations and conducting thorough inspections.
- d. *Knowledge of the industry.* The familiarity of the officers with the motor carrier industry and local and regional carriers provide valuable background information on the carriers and their practices, including their most common routes. This information is very helpful during the inspections to detect unusual patterns in the log book and detecting log book falsifications.

## 2.3. Interview Techniques

Good interview skills were found to be key for an effective driver inspection. A good interview enables officers to obtain far more than the written information in the driver's record of duty. The interview and the use of information from trip documents and other sources provided an effective tool for officers to accurately trace driver's activities and ascertain the validity of log book entries. A good interview comes with proper training, adequate experience, officers' confidence in understanding the regulations, and comfort in dealing with the driver. Officers who were at ease and courteous received more complete responses from the driver, who willingly revealed more information.

A best practice in interviewing the driver is to start with open questions to break the ice and encourage the driver to participate. For example, officers asked the driver where they were coming from, where they were going, and how their trip was. The officers also

observed drivers' actions and non-verbal clues from the time they entered the inspection site and throughout the interview.

Once the driver was comfortable, the officers focused more on timing and asked about the last time the driver was home, or when they got their last load, how much they had to wait for loading, etc. This type of questioning was sometimes conducted even before examining the driver entries in the log book. After obtaining the log book and supporting trip documents, the questions continued targeting specific entries. The officers allowed the driver enough time to react to the questions and to tell them more about the trip. Interaction is a key to a good interview, by allowing the driver to participate in the conversation. The more comfortable the driver is, the easier it is to obtain information.

- a. Use the open questions interview technique by asking general questions before directing the questions specifically on the log book. For example, "Where are you coming from? Where are you going?" As the drivers felt more relaxed, they were more willing to answer questions and explain their activities which allowed officers to learn more about their trip than just written records.
- b. Observe driver actions and non-verbal clues while driving into the inspection site, when getting off the vehicle, and during the interview.
- c. In addition to the primary driver, observe and interview any co-drivers riding in the truck.
- d. Ensure the driver does not have an opportunity to change log book entries before the enforcement contact.
- e. Conduct a detailed investigation of log book entries, supplemented by gas, motel receipts, toll receipts, and shipping papers.
- f. Treat drivers with dignity and courtesy.
- g. Ask what time zone the driver is logging.
- h. Ask for the trip envelope, not just individual documents, and use supporting hand gestures, like extending an open hand, requesting the documents.
- i. Use shipping papers if available and call the shipper to check for times of loading or unloading.
- j. Ask drivers about log book entries while the records are out of the driver's sight. Then follow by persistent questioning of the driver using key indicators from his/her initial answers, supporting documents (i.e., receipts), and the log book.
- k. When available, officers obtain trip information from computer software (PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker<sup>®</sup>) and use it while interviewing the driver. This provides more information to the officer to direct the interview to critical items.

- l. Results from PCMiller,<sup>®</sup> Automap,<sup>®</sup> and Trip Maker<sup>®</sup> printed and discussed with the driver. This increases the driver's cooperation with the officer.
- m. Use of a telephone or fax machine to validate information on receipts and other documents to verify driver's activities, by contacting the motor carrier company, truck stops, and other inspection sites.
- n. Use adequate space to spread out log books and receipts instead of fumbling with documents by the commercial vehicle.

## ***2.4. Information Gathering***

One of the major goals of an effective interview is to obtain additional information from the driver about their activities. There are many sources of information that can guide the officers to the driver's whereabouts during the preceding hours or days. Some of this information will be readily available from documents carried in the commercial vehicle or may be obtained from other sources, such as truck stops. Some of the key sources of information are summarized below.

### **Trip Packet/other documents**

Commercial vehicle drivers are required to keep track of their expenditures on fuel, food, tolls, motel, services, etc., and may carry shipping papers. Receipts in most cases show the location and date, and sometimes the time of the transaction. Shipping papers of some commodities, such as food products, also show the location, date, and time of loading. Examples of paper documents to look for include: weight slips, fuel receipts, shipping papers, Comdata reports (certified checks through an established account for the motor carrier, used for payment of trip expenses and fines in place of cash) which show vehicle number and name of company and driver, motel receipts, toll receipts, service receipts, pay records, and inspection station clearance forms.

For example, Colorado issues an inspection clearance form at fixed port facilities and keeps data on each commercial vehicle identified by the last 8-digits of the vehicle identification number (VIN) at the inspection facility. Wyoming issues a similar form at fixed port facilities and keeps vehicle information in a computerized data base that can be accessed by officers to determine the time a commercial vehicle cleared the facility.<sup>2</sup>

- a. Obtain the trip envelopes from the driver.
- b. Obtain time, date, and location information to ascertain if the driver falsified the log book from every possible source including, but not limited to:
  - i. weight slips
  - ii. fuel receipts
  - iii. shipping papers
  - iv. Comdata reports which show vehicle number and company/driver name
  - v. motel receipts
  - vi. toll receipts

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<sup>2</sup> Contact lists for Colorado and Wyoming inspection sites are provided at the end of this chapter.

- vii. service bills
- viii. pay records
- ix. Colorado's inspection station clearance form, which keeps data on commercial vehicle entering fixed ports identified by VIN last 8-digits
- x. Wyoming's fixed inspection and weigh sites maintain a database of vehicles entering fixed ports and issues a clearance form
- xi. Oregon DOT red weight slips, which provide date and time

#### **Telephone interviews**

In addition to trip receipts and documents, officers obtained time and location information by contacting service stations, motor carrier dispatch, shippers, and other enforcement locations in their State or in other States. Officers also used these calls to verify the accuracy of information presented by the driver.

- c. Use phone or fax machine to verify driver's activities, by contacting the motor carrier company (dispatcher), truck stops, other inspection sites, and shippers.
- d. Document information from the phone interviews from other parties and include the documentation in enforcement cases.

#### **Use of computer software**

Officers verified mileage and travel times using maps and computer software (PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker<sup>®</sup>). The officers use the software results, discuss them with the driver during the interview and ask for explanation regarding questionable entries in the log book.

#### **Other practices**

Officers in some of the States visited developed some methods on their own to help in the inspection process. Some of these practices include:

- e. Officers use their knowledge of and familiarity with the geographic area and motor carriers to verify information.
- f. Record information on vehicle and driver and the date at truck stops or inspection stations to be used in enforcement contacts (i.e., on the return trip).
- g. Officers hand out a printed list of required documents to the driver at the beginning of the enforcement contact. The list includes all the documents that could be used in the inspection (i.e., CDL, registration, trip packet, etc.).
- h. Compare fuel purchases with expected consumption based on the mileage and reasonable fuel consumption rates.

### **2.5. Technology/Equipment/Tools**

Technology plays a growing role in enabling State and Federal MCSAP agencies to accomplish their missions effectively and efficiently. This section focuses specifically on the use of technology and other equipment and tools that support roadside enforcement

activities and have an impact on the quality of HOS inspections. Since the focus of this discussion is on the use, this equipment is classified by function into:

- 1) selecting drivers and vehicles for inspection
- 2) estimating trip travel times and distances
- 3) gathering additional information for
  - establishing a record of the time and location of a commercial vehicle, and
  - exchanging information between different enforcement locations.

### Selection

The selection of commercial drivers/vehicles for Level III inspections was aided by several systems and methods.

- a. Use the Inspection Selection System (ISS), which returns a safety score for the motor carrier based on their safety data after entering the vehicle's DOT number. Officers also use the ISS as a tool to learn more information about trucking companies they are not familiar with.
- b. Use radar and radar detector detectors. Radars are used to target commercial vehicle drivers for Level III inspections. The officers believe speeding could be an indication the driver is running out of hours. Similarly, when radar detector detectors reveals the presence of a detector, officers make note that speeding may be involved.
- c. Monitor CB radio traffic between drivers to detect possible signs of abnormal activities.
- d. Use inspection station clearance forms. In some Western States (Colorado, Wyoming), the inspection stations keep a record of the commercial vehicle, time, and date of clearing the facility. This information is used to select drivers for inspections, and to detect falsifications if log book times did not match what was in the database. It should be noted that this information can be obtained from Colorado and Wyoming by officers in other States to check the time and location of when the driver/vehicle cleared an inspection facility.
- e. A Log Book Surveillance Pilot project used document scanners to create a computerized record of commercial driver log books at various locations and forwarded that information to other inspection sites using fax machines. The project was coordinated in Idaho, Montana, Oregon, Utah, and Washington. The information forwarded from previous inspection sites was used to detect any falsification in the driver log books for the segment of their trip between the inspection sites and to select commercial drivers from that list for HOS inspections.<sup>3</sup>

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<sup>3</sup> Best practices (d) and (e) also fit under gathering information and estimating time/distance at various locations. They provide reference points (location, date, time) that could be used to ascertain the driver's record of duty.

### **Estimating travel times/distances and gathering information**

To estimate travel times and distances for verifying log book entries, officers used computer programs, maps, road atlases, and distance tables. Because of the growing availability of computers in the field, they were frequently used to check distances and travel times using several software programs, including PCMiller,<sup>®</sup> Automap,<sup>®</sup> and Trip Maker.<sup>®</sup> The choice of the program is influenced by the available resources, but PCMiller,<sup>®</sup> which costs significantly more, is specifically designed for motor carrier use. The other two programs are for general trip planning purposes, but still provide valuable and easy to obtain information.

- f. Use computer software (PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker<sup>®</sup>) to check mileage to verify record of duty entries .
- g. Provide dispatch center with computer software to help verify record of duty entries, such as PC Miler,<sup>®</sup> Automap,<sup>®</sup> and Trip Maker<sup>®</sup> (Wyoming, Nebraska).

In the absence of computer software, officers used area maps, road atlases, and distance tables. Some officers plotted common routes on these maps to expedite looking up distances. In some States, distance tables showing distances between common origins and destinations were used by the officers. Another type of map used showed the location of toll facilities and the distances between successive toll payment locations. Officers used calculators and Log Checkers<sup>®</sup> to calculate travel times and speeds. In addition, officers used telephones, cellular phones, fax machines, and computer systems to obtain additional information.

- h. Use maps to trace trips and approximate times.
- i. Use phone, cellular phone, and fax machine on occasion to contact companies, truck stops, shippers, and other inspection locations to verify driver's activities.
- j. Use of document scanners, fax machines, and copiers to document driver record of duty and forward them to other inspection locations (part of the multi-State Log Book Pilot project in Idaho, Montana, Oregon, Utah, and Washington).
- k. Use computerized database systems to collect information about commercial vehicles and drivers clearing an inspection location. This information shows the time and date and could be used by officers in other States' locations. [See attached list of telephone numbers and location for Colorado and Wyoming scales on pages 22-23.]

## ***2.6. Selection Process***

Several practices for selecting commercial vehicle drivers for roadside inspections were observed in the field. The practices range from random selection to the use of the ISS. The officer's familiarity with their locality, the types of shipments, and the motor carriers operating in that locality influenced their selection process. The drivers' actions prior to the contact or when they enter the inspection facility and if they showed any signs of fatigue were also grounds for conducting an inspection. Information from other enforcement locations, such as warnings of an out-of-service driver, was used to select

and inspect those drivers. Refer to Section 2.5, page 14, for more practices, such as the use of radar detector detectors and the inspection port databases.

- a. Use the Inspection Selection System (ISS), which returns a safety score for the motor carrier based on their safety data after entering the vehicle's DOT number.
- b. Rely on officers' awareness of area shippers and carriers, types of shipments, and likely violators for inspection selection.
- c. Base selection on driver actions, the driver's speech, and any signs of fatigue, past experience with the company, appearance of the vehicle and the load as possible basis for HOS contacts.
- d. Use inspection facility (scale) database to collect information about commercial vehicles clearing an inspection location. This information shows the time and date and could be obtained by officers in other States or locations to verify drivers log entries. [See attached list of Colorado and Wyoming scale facilities pages 22-23]
- e. Use information forwarded from enforcement contacts at other locations to follow-up on enforcement actions, such as an out-of-service order.
- f. Use noted information collected on vehicles at truck stops or inspection stations to select vehicles for inspections at another time/location (i.e., upon returning).

## ***2.7. Coverage***

Generally, roadside enforcement locations may be classified as fixed site or mobile, with varying operating hours. The schedule of fixed site operations is a management decision influenced by traffic levels and available resources. A best practice observed in some States was to vary the shift assignments at fixed sites. Mobile units also vary their shift assignments and concentrate on areas of potential violators.

As more State MCSAP programs move toward performance-based systems, data analysis is increasingly used to identify most effective roadside enforcement locations. Several States visited use crash and inspection data from Safetynet or other systems, to target problems areas.

In some States, such as Iowa and Utah, the MCSAP agency used a State-level accident location database to develop enforcement plans. The Iowa State Patrol uses an Accident Location and Analysis System (ALAS) based on Geographical Information Systems (GIS) to identify high crash locations. The system can easily identify crash areas and keeps information about each crash in the same database. Utah also is using an Arcview GIS crash analysis system to guide roadside enforcement activities. Further, Utah is participating in a MCSAP Performance-Based Pilot project that targets their I-80 high-crash corridor with coordinated roadside Level III inspections and conducts compliance review follow-ups on problem carriers.

Several States cooperate in joint enforcement efforts to target a larger coverage area increasing the chances of catching violators. For example, Florida and Georgia conduct a one-week safety inspection special detail to focus on HOS violations and cover a wide geographical area along their borders. Similarly, Oregon and Washington frequently work on special enforcement assignments and exchange information about violators. The Iowa State Patrol worked on a project with New Jersey to conduct checks on traffic originating in the West Coast on interstate I-80. Most drivers on this route reach their legal hours in Iowa. A check was made on drivers inspected in Iowa, when they reached New Jersey, to detect if they falsified their log books after the Iowa inspections.

- a. Extend the duration of the enforcement campaign and vary shift assignments.
- b. The Mobile Enforcement and Education Team (MEET) in Wyoming provides good flexibility and mobility. Officers use a trailer seized from drug operations to set up enforcement sites in unexpected areas.
- c. Traffic Enforcement Program increases the involvement of enforcement officers and supplements enforcement activities at various sites.
- d. Multi-agency participation and enforcement cooperation with other states--Log Book Surveillance Pilot Project using document scanners to copy entries of the driver record of duty and transmitting them to other States inspection locations (Idaho, Montana, Oregon, Utah, and Washington).
- e. Target enforcement at problem areas, i.e., high-crash locations.

## ***2.8. Penalties***

An integral part of the roadside enforcement program is to have an effective fine structure. One of the key requirements was consistency of fines in different jurisdictions within the state. In addition, some State laws allow officers to issue violations directly to the motor carrier as a result of a roadside contact. They also send a follow-up letter to the motor carrier stating the nature of the violation and the required action.

- a. Fine is a lien on the vehicle not the driver, thus the vehicle can be held until the fine is collected.
- b. Penalties can be issued to the motor carrier from a roadside enforcement contact (Pennsylvania, intrastate carriers only in Maryland, Florida, and Wyoming).
- c. Send follow-up letter to the motor carrier stating roadside violations and possible administrative action if the inspection report is not returned (Utah).

## ***2.9. Innovative Practices***

During the site visits, the team learned about several other roadside practices that were not listed in the above categories. These practices in many instances resulted from personal initiative by officers or other personnel to improve the roadside inspection process. Some examples of these practices include:



- a. Developing special forms or information sheets to summarize information collected during interviews.
- b. Using 60/70-hour violations worksheet.
- c. Inspection form has space for calculating the 70-hour rule (North Dakota).
- d. Using a separate inspection form for driver-only inspections.
- e. Inviting judges to watch inspections at the field so they develop an understanding of the inspection process (Nebraska, Pennsylvania).
- f. A log sheet kept at inspection location with driver and vehicle information for sharing with officers during the next shift.
- g. Phone interview sheet utilized in Washington to document information from other parties to verify time (i.e., Comdata reports, interviews with company officials). This sheet may be included in enforcement cases.
- h. Exchange vehicle and driver information with other enforcement locations.

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*Additional Resources/Contacts*

- ☞ For more information on the Log Book Surveillance Pilot Project, contact Washington State OMC Division Office, (360) 753-9875.
- ☞ For information on Wyoming's MEET contact Lt. Jess Oyler, Wyoming Highway Patrol, (307) 777-4318.
- ☞ List of Colorado's weigh scales, location, and telephone numbers (page 22)
- ☞ List of Wyoming's scale stations (ports of entry), location, telephone numbers, and hours of operation (page 23)
- ☞ Wyoming's port of entry clearance form (page 24)
- ☞ Washington State's 70-hour worksheet (page 24)
- ☞ Iowa State Patrol's 60/70-hour worksheet (page 25)

### *Colorado's scale list and telephone numbers*

#### **Port of Entry Headquarters**

1881 Pierce St., Rm. 118  
Lakewood, CO 80214-1497  
PH: (303) 205-5690  
Fax # (303) 205-5764

Ft. Collins Port of Entry - DUAL  
2237 Frontage Road, SE  
Ft. Collins, CO 80525  
PH: (970) 482-1622  
Fax # (970) 482-1622  
(1 ½ mile south jct. COLO 14 & I-25 on I-25)

Platteville Port of Entry  
13336 Hwy. 85  
Platteville, CO 80651  
PH: (970) 785-2427  
Fax # (970) 785-2427  
(1/2 mile south jct COLO 66 & US 85 on US 85)

Ft. Morgan Port of Entry - DUAL  
13395 I-76 Frontage Road  
Ft. Morgan, CO 80701  
PH: (970) 867-5623  
Fax # (970) 867-5623  
(6 miles west of US 34 & US 6 on I-76)

Limon Port of Entry - DUAL  
Route 1, PO Box 86  
Limon, CO 80828  
PH: (719) 775-9758  
Fax # (719) 775-9758  
(1/4 mile west jct. COLO 71 & I-70 on I-70)

Lamar Port of Entry - DUAL  
7100 Hwy. 50  
Lamar, CO 81052  
PH: (719) 336-4712  
Fax # (719) 336-4712  
(1/2 mile west jct. COLO 196 & US 287 on US 50)

Trinidad Port of Entry  
I-25 Exit 11  
Trinidad, CO 81082  
PH: (719) 846-2408  
Fax # (719) 846-2408  
(2 miles south of Trinidad on I-25)

Ft. Garland Port of Entry  
PO Box 517  
Ft. Garland, CO 81133-0323  
PH: (719) 379-3543  
Fax # (719) 379-3543

Cortez Port of Entry  
PO Box 1136  
Cortez, CO 81321-1136  
PH: (970) 565-9420  
Fax # (970) 565-9420  
(2 miles south of Cortez on US 160 & US 666)

Loma Port of Entry - DUAL  
1255 Thirteen Road  
Loma, CO 81524  
PH: (970) 858-1068  
Fax # (970) 858-1068  
(I-70 at Loma Interchange)

Dumont Port of Entry - DUAL  
PO Box 169  
Dumont, CO 80436  
PH: (303) 567-4807  
Fax # (303) 567-9477  
(west edge of Dumont on US 6 & US 40 & I-70)

Monument Port of Entry - DUAL  
600 8<sup>th</sup> Street  
Monument, CO 80132  
PH: (719) 481-2281  
Fax # (719) 481-2494  
(1/2 mile north jct. US 85 & COLO 105 on I-25)

*Wyoming scale stations list*

**ALPINE**

Tel (307) 654-7569  
519 US Hwy 26  
Alpine, WY 83128  
5:00 a.m. - 9:00 p.m. ( 7 days per week)

**CASPER**

Tel (307) 473-3280  
1771 N Salt Creek Hwy  
Casper, WY 82601  
7:00 a.m. - 7:00 p.m., (Mon. - Fri.)

**CHEYENNE US 85**

Tel (307) 777-4895  
6525 S Greeley Hwy  
Cheyenne, WY 82007  
5:00 a.m. - 9:00 a.m. (Mon. - Fri.)

**CHEYENNE I-80**

(307) 777-4894  
3470 I-80  
Cheyenne, WY 82001  
24 HRS (7 days per week)

**CHEYENNE I-25**

Tel (307) 777-4896  
4101 I-25  
Cheyenne, WY 82007  
24 HRS (7 days per week)

**EVANSTON**

(307) 789-3538  
#400 I-80  
Evanston, WY 82931  
24 HRS (7 days per week)

**FRANNIE**

Tel (307) 664-2389  
278 Ash  
Frannie, WY 82423  
5:00 a.m. - 9:00 p.m. (Mon. - Fri.)

**GILLETTE**

(307) 682-4030  
1800 E Hwy 14 & 16  
Gillette, WY 82716  
7:00 a.m. - 7:00 p.m. (Mon. - Fri.)

**KEMMERER**

Tel (307) 877-4229  
52622 Hwy 30  
Kemmerer, WY 83101  
24 HRS (7 days per week)

**LARAMIE**

Tel (307) 745-2200  
3505 S 3<sup>rd</sup>  
Laramie, WY 82070  
24 HRS (7 days per week)

**LUSK**

(307) 334-3814  
250 W 8<sup>th</sup>  
Lusk, WY 82225  
5:00 a.m. - 9:00 p.m. (7 days per week)

**SHERIDAN**

(307) 674-7091  
2661 N Main St.  
Sheridan, WY 82801  
24 HRS (7 days per week)

**SUNDANCE**

Tel (307) 283-1616  
4218 Old Hwy 14  
Sundance, WY 82729  
24 HRS (7 days per week)

**TORRINGTON**

Tel (307) 532-2519  
Rt. 1, Box 373A  
Torrington, WY 82240  
5:00 a.m. - 9:00 p.m. (7 days per week)

# Wyoming's Port of Entry Clearance Form

PORT OF ENTRY CLEARANCE NO. FEE		#	117057
US DOT NO.		ACC NO.	
WY FUEL LIC		DOCKET NO.	M-000000001
DATE & TIME	1996/06/25 12:57		
LOCATION ISSUED	CHEYENNE I-25 POE		
# WTDPERSON			
COMPANY NAME	CVC		
ADDRESS	COMPANY NAME NOT COLLECTED		
CITY	CHEYENNE	STATE	WY
MAKE OF UNIT	TRUK	LICENSE NO.	5648
	TRUCK 3 TRACTOR		STATE RI
	PLACARD NO.	SEMITRAILER	TRAILER
		N HAZARDOUS MATERIAL	BUS
COMMODITY TRANSPORTED	EMPTY		
THIS DOCUMENT SUBJECT TO CONDITIONS OR REQUIREMENTS ON BACK SIDE			
FSCV-643			

Wyoming's Port of Entry Clearance Form

		70	NAME
		Total from A	COMPANY
		Hours Available Today	LICENSE NUMBER
		Hours on Duty Today	CITATION NUMBER
		Yesterday	Hours Over 70
A		7 Day Total	

Washington State 70-hour Worksheet

Date	Total (Lines 3 & 4)			
		—		—
		—		—
		—		—
		—		—
		—		—
		—		—
		—		—
Today			—	—
		Total	60/70	Hrs Over
		60 Hrs. / 7 Days Sec. 395.3(b)(1) If carrier does <b>not</b> operate vehicles every day of the week.		
		70 Hrs. / 8 Days Sec. 395.3(b)(2) If carrier operates every day of the week		
		DSDE 98		

Iowa State Patrol 60/70-hour Worksheet



# 3

## ***COMPLIANCE REVIEWS***

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This chapter summarizes information about State practices related to compliance reviews (CRs). Compliance reviews are an integral part of the HOS compliance program, which support roadside enforcement and provide educational contacts and outreach to motor carriers. The information observed during the site visits is arranged according to its role in the compliance review process in the following elements: management philosophy, selection, information gathering, procedures, penalties, use of technology, and training. This information is presented in the following sections.

### ***3.1. Management Philosophy***

A successful compliance review (CR) program requires that management recognizes the importance of compliance reviews and dedicates adequate resources for the program. In Utah for example, compliance reviews are closely coordinated with roadside enforcement activities through a pilot project on the I-80 crash corridor. Effective management of compliance reviews also requires close coordination with the OMC (as seen in every State visited), especially in States limited by law from conducting compliance reviews on all motor carriers or from imposing an enforcement action.

- a. Management recognizes the importance of CRs as an effective enforcement and educational tool.
- b. Management provides adequate resources for conducting CRs.
- c. Keep open lines of communication between the State and the Federal OMC in the State and in other States.
- d. Conduct compliance reviews on intrastate motor carriers.
- e. Allow CR officers to spend time on roadside inspections, which helps in information exchange with roadside officers.
- f. During visits to the motor carriers, use of unmarked cars and non-uniformed officers leads to a non-confrontational atmosphere.
- g. Coordinate CRs with roadside inspection data and information.

### ***3.2. Selection***

Most of the States visited during the peer exchange had some type of a priority list used to target motor carriers with CRs. Generally these lists were similar to the Selective Carrier Enforcement (SCE) list used by the OMC. Compliance reviews were also conducted after major crashes involving commercial vehicles. In Utah, a pilot project is coordinating compliance reviews with roadside enforcement on the I-80 high-crash corridor, by targeting motor carriers with repeated roadside HOS violations with compliance reviews. In addition, several MCSAP agencies work with other States to follow-up on problem carriers and handle requests from these States either directly or through the OMC (for example, Colorado and Wyoming).

- a. Use a priority list to select problem carriers, for example, SCE, SafeStat.
- b. Develop evidence outside the SCE list to select carriers and gather information.
- c. Conduct CRs after major crashes involving commercial vehicles.
- d. Include information on non-compliance in the priority list for CR.
- e. CRs are triggered by roadside inspection reports on high-crash corridor.

### ***3.3. Information Gathering***

These practices refer to the procedures officers used to obtain information prior to conducting the CR. This information helps the CR officers in preparing for the CR by having some background information on the safety performance of the motor carrier and any previous violations and enforcement actions taken against the carrier. Officers used all available information from all sources, including Safetynet, to develop a motor carrier profile. Officers also used information collected at the scene of major crashes involving a commercial vehicle of a certain carrier. In several States, information from roadside inspections also was used for the CR. This information is further enhanced by contacting the OMC and other States for additional insights on a particular motor carrier that could identify common problem areas and repeated violations.

- a. Collect information from crash scenes involving commercial vehicles, including any hours-of-service data.
- b. Use information from other State and Federal agencies in the State and in other States.
- c. Collect information from quarterly Safetynet reports and roadside inspections.
- d. Use information from complaints and the priority list.



### ***3.4. Procedure***

This group of practices refers to all the activities related to conducting the compliance review, from the time of deciding to review a motor carrier to the time of concluding the review. The States visited in the peer exchange had well-organized processes including detailed steps and forms for conducting the CR. Some examples of best State practices include:

- a. Run a profile of the motor carrier using Safetynet.
- b. Review profile and make notes on specific HOS violations and pull specific inspection reports.
- c. Review the motor carrier's history if available, i.e., previous CRs, responses to CRs, etc.
- d. Spend time meeting with highest ranking official of the carrier, discuss the terms being used in the review, agree on definitions of those terms, and request copies of trip packets.
- e. Review drivers' trip report, and identify the routes used and number of miles.
- f. Ask for and look at receipts and documents, such as fuel receipts, toll receipts, permits, service receipts, motel and miscellaneous charges, pay receipts, payroll, records of dispatch, and fuel invoices (fuel card records are printed out and faxed daily to the motor carrier and show where and when fuel was purchased).
- g. In examining driver logs, keep in mind the different time zones, and have in possession a Julian calendar, and consider daylight savings time.
- h. Use document scanners to gather supporting evidence.
- i. Use of unmarked cars and non-uniformed officers lend to non-confrontational atmosphere.
- j. Use laptop computers and software (PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker<sup>®</sup>) to verify travel times and CAPRI software to aid in State and Federal consistency.
- k. Conduct an exit interview after the conclusion of the CR.

### ***3.5. Penalties***

An effective penalty structure is an integral part of the compliance review process. One of the key findings in State practices was to have consistency in the penalty structure. Some States had additional penalties, for example, in Arizona, officers have the ability to seize registration of all vehicles owned by the motor carrier. It also is very important to coordinate with the prosecuting attorney's office and the Department of Motor Vehicles to ensure effective enforcement procedures and penalties for unsafe motor carriers. Some of the States' best practices include:

- a. Well structured process allows for effective and consistent penalties.
- b. Ability to seize registrations of all vehicles owned by the motor carrier (as in Arizona).
- c. Coordination with prosecuting attorney's office and the Department of Motor Vehicles ensures effective enforcement procedures and penalties for unsafe motor carriers.
- d. Use of the uniform fine assessment.

### ***3.6. Technology***

Several pieces of equipment and systems were used by officers during the compliance review. The use of laptop computer-based CR programs assures uniformity by both State and Federal investigators conducting CRs. Computer software on the laptop for calculating distances and travel times (PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker<sup>®</sup>) and for referring to motor carrier regulations (MCREGIS) are also used during the CR. The use of document scanners during CRs aids investigators in collecting evidence when building cases against motor carriers. Nebraska and Washington are experimenting with the use of these document scanners.

- a. Use of laptop computers during compliance reviews.
- b. Use of computer software to verify mileage and travel times (PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker<sup>®</sup>).
- c. Use of Motor Carrier Regulations Information System (MCREGIS) to refer to motor carrier safety regulations interpretations.
- d. Use of Compliance Analysis and Performance Review Information (CAPRI) Software to assure consistency.
- e. Use of document scanners to gather evidence and make records that can be used in a possible enforcement case.

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#### *Additional Resources/Contacts*

- ☞ For more on Pennsylvania's Federal CR, contact Mr. Mark Milligan from the Pennsylvania OMC at (717) 782-4443.
- ☞ For information on the use of document scanners, contact Mr. Doug Donscheski, MCSAP Coordinator, Nebraska State Patrol, telephone (402) 471-0105.
- ☞ For information on Utah's I-80 Pilot Project coordinating CR's and roadside inspections, contact Ms. Shirleen Hancock, Utah DOT, telephone (801) 965-4781.

# 4

## *TRAINING*

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The peer exchange team concluded that training was the most fundamental element in an effective HOS compliance program. The level and amount of training had a profound impact on all other elements of HOS compliance. In particular, the success of HOS program areas involving direct contact with commercial drivers and motor carriers, such as roadside inspections and compliance reviews, are directly dependent on adequate training. Training affects the morale, confidence, level of comfort, and competency of all personnel who make up the backbone and the most visible element of the State program.

There are several major issues related to training, which include: the level of training, the frequency and timing of training, the types of information provided, and the format or mechanism of the training. It should be noted that there is no single training program that can fit the needs of all States. However, continuous and open communications with field personnel provide information on training needs. Further, adequate feedback on program performance through data analysis and open communications allow management to detect potential problems early. Consequently, these problems could be alleviated through increased training or special training programs.

Training must be an on-going process that ideally combines classroom and hands-on or on-the-job training. It starts with providing the minimum skills and knowledge required to enforce motor carrier safety regulations. After that initial training, it is important to provide an opportunity for trainees to develop a level of comfort in the field. A best practice observed during the peer exchange was a mentor program where trainees work with experienced officers in the field. This mentor program provides an excellent opportunity for exchanging information not taught in the classroom, building confidence, and developing ties within the team.

The peer exchange team also observed that the use of trainers from the same State or agency produced better results. Those trainers were familiar with the State issues, had field experience with local motor carriers and shippers, and were more accessible to training officers. One of the most effective forms of training took place through interaction among officers in the field, during special assignments, or during regular contacts. In Iowa for example, officers from the Iowa State Patrol's CORE group coordinated motor carrier enforcement and training activities with other troopers, and provided a valuable resource of expertise and encouraged troopers to work more on commercial vehicle inspections. Most of the States visited during the peer exchange use local trainers in all or part of their training and have achieved excellent results.

#### ***4.1. Basic Elements***

The emphasis of training programs should be on quality and effectiveness. Trainees must spend enough time learning the basic knowledge and skills required to conduct quality work in the field. An essential knowledge element necessary for HOS compliance is a full understanding of motor carrier safety regulations for interstate and intrastate motor carriers. Further, a successful training program will address interview skills that are critical to effective driver inspections. The highlights of these basic skills include these elements, which are explained in the following sections:

1. interstate and intrastate motor carrier safety regulations
2. interview techniques
3. information sources
4. use of technology

##### **Motor carrier regulations**

One of the essential knowledge elements necessary for HOS compliance is a full understanding of motor carrier safety regulations for interstate and intrastate motor carriers. This includes understanding the requirements for log books, exemptions, legal on-duty and driving limits, and familiarity with the format of log books. It is imperative that all officers have the most current set of motor carrier regulations and intrastate exemptions to ensure uniformity.

- a. Officers are provided adequate training on interstate and intrastate motor carrier safety regulations, with emphasis on HOS requirements, including log books.
- b. Officers are informed of any regulatory changes and provided with copies.

##### **Interview skills**

Interview techniques are among the most essential skills that must be covered by training. Only through an effective interview can officers obtain adequate information to aid in discovering any falsification in the driver's log book. It was clear that the officer's level of comfort in conducting an effective interview increased with their experience in the field. During the site visits, when asked about their training needs, field officers always ranked interview techniques as the number one priority. In most of the States visited, interview skills training was receiving growing attention.

- c. The North Dakota Highway Patrol provides a Kinesics interview class to new officers and has a schedule to provide that training to all of its current officers.
- d. One of the best practices to provide adequate interview training was using a role-playing session where officers played the roles of drivers and officers.
- e. Former commercial drivers were used to provide insights to the trainees on ways to obtain better information from the driver.
- f. Training videos were used to demonstrate how driver or vehicle appearances could sometimes be misleading in pursuing HOS inspections.

### **Information gathering**

Part of the training provided to officers is to familiarize them with all types of supporting documents found during roadside inspections and compliance reviews.

- g. Familiarize officers with typical trip-related documents, such as fuel receipts, and provide them with examples.
- h. Officers are trained on how to use trip documents to obtain time, date, and location information.
- i. Officers are provided with possible sources to call, such as dispatchers, shippers, service stations, toll plazas, and other inspection stations to verify documents.

### **Use of technology**

The basic training should address the use of technology and special equipment that aids in obtaining additional trip information and improves the officers' ability to detect HOS violations. Most importantly is the use of special software programs (and the related computer training) such as PC Miler,<sup>®</sup> Automap,<sup>®</sup> and Trip Maker.<sup>®</sup>

- j. Provide officers with adequate training on the use of computers and specialized software to aid in roadside enforcement and compliance reviews.

## ***4.2. Initial Training***

All officers conducting driver-only Level III inspections must receive a basic HOS training course, which should include classroom and on-the-job training. This training must cover the basic skills and knowledge and be of adequate length and depth necessary for conducting quality HOS inspections. At a minimum, this training should include the basic HOS element of the 40-hour North American Standard training course. Since some agencies will have to train a large number of officers, a phase-in approach may be used in the training process. However, the training program should be an on-going process and should respond to any rising needs and new issues.

- a. Highway patrol officers receive Level II and Level III training in a 40-hour class. The training also includes log books and some interview techniques.
- b. All MCSAP officers receive the North American Standard 80-hour Level I training course.
- c. Initial training includes classroom and field training.
- d. Statewide training provided by one agency assures consistency.
- e. State has own certified instructors.
- f. All weight enforcement officers are Level III trained, including periodic in-service training.

### ***4.3. In-Service Training***

The peer exchange team strongly emphasizes the need for an on-going training program. Ideally, HOS training could be part of an annual in-service training program for all officers involved in HOS inspections. Periodic training is especially important for officers (troopers) who do not work on motor carrier enforcement full-time. Such training could strengthen the interest of part-time officers and help them sustain the necessary knowledge and skills needed for effective HOS inspections.

- a. Provide officers with HOS training as part of their regular in-service training or when needed.

An on-going training program is supplemented by good communications and comradery among agency personnel and field officers. For example, experienced officers can act as mentors to less experienced officers. In-service training also promotes both formal and informal exchange of information among field officers on new issues, level of activity, and unusual inspection cases. These exchanges foster team spirit, provide valuable insights, and encourage productive competition among the officers.

- b. Encourage formal and informal exchange of information and expertise among field personnel, which will support on-going training efforts.

### ***4.4. Specialty Training***

Some of the States visited (i.e., Arizona, Idaho, Maryland, Nebraska, and Pennsylvania) have developed special training programs in response to some unique needs in their motor carrier safety program or as a special initiative to improve HOS compliance. These practices can be very helpful to other States to either adopt wholly or in part in new programs or incorporate in existing training programs.

- a. The OMC Division Office in Pennsylvania developed an *Advanced HOS and Log Book Training* course in cooperation with the Pennsylvania State Police and the Maryland State Police. The course was offered to officers in Maryland, Pennsylvania, and Delaware. After the training was implemented, there was an increase in the number of HOS violations detected and in the driver OOS rates. The course offered interview techniques and guidelines on unique receipts and documents to request from the driver.
- b. The Maryland State Police developed an innovative *Driver Fatigue Detection and Enforcement Training* program. The program consists of eight modules pertaining to fatigue, such as impact of fatigue on highway safety, definition of fatigue, sleep and sleep disorders, FMCSR (49 CFR 392.3), and fatigue countermeasures. The training program, which may be conducted in about four hours, is available to other States through the Maryland State Police.
- c. Idaho developed an experimental distance learning program, which uses a computer and modem to log in on a host system for training officers on commercial vehicle safety inspections. The program could be accessed from any State after a site access was arranged. Participants use a personal computer to

connect to the main server to obtain the training material and exercises. Participants have the flexibility to work on the material and assignments at their own pace as long as they meet the required time frame. The system allows “chatting” with other participants, similar to an e-mail system, encouraging discussions and sharing information among the training class on the exercises and actual inspections from the field. Initial evaluation results showed that officers trained in the distance learning program had a higher rate of detecting HOS violations than officers who received traditional classroom training.<sup>4</sup>

- d. The Arizona Department of Public Safety offers Spanish classes to all officers to facilitate interviews with Mexican drivers. This training will be very valuable as the implementation of NAFTA includes other States.
- e. The Nebraska State Patrol has a program that provides roadside enforcement training to officers conducting compliance reviews. The CR officers are assigned to the field to work on inspections and interact with roadside officers.
- f. The Iowa FHWA/OMC Division and the Iowa State Patrol developed a manual on Commercial Driver and Vehicle Safety Inspection Training. The manual contains an overhead presentation and supporting material covering various regulations, inspection forms, required documents, legal processes, and fine schedules for the trainees. The overheads for the training are available in electronic format, in Microsoft PowerPoint.
- g. The North Dakota Highway Patrol and the Nebraska State Patrol provide Kinesic interview training course to all officers.
- h. Officers are trained on the use of computers, including software applications for completing inspections, i.e., ASPEN, or selecting vehicles, i.e., ISS, and collecting travel distance and times information, i.e. PCMiler.
- i. Challenge competitions, such as “Top Hands,” improve officers’ techniques in conducting the inspections and identify additional training needs (Utah).
- j. Periodically assigning CR officers to conduct roadside inspections provides an opportunity for them to stay up-to-date with safety issues and concerns.
- k. A Traffic Enforcement Student Manual and presentation overheads are available in PowerPoint presentation format (Iowa OMC and Iowa State Patrol).

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<sup>4</sup> “Distance Learning Approach to Training,” Idaho Department of Law Enforcement, Statistical Analysis Center, 1996.

#### ***4.5. Cooperation***

The training activities in the States visited were coordinated between the lead MCSAP agency and other Federal and State agencies. Effective coordination of training programs is key to achieving a high and consistent level of quality inspections. To ensure consistency, the MCSAP lead agency played a leadership role in providing and coordinating HOS training. In addition, there were many examples of cooperation between Federal and State motor carrier safety personnel in the development and teaching of training programs.

- a. Liaisons from Arizona Department of Public Safety (DPS) coordinate training for Mexican carriers and law enforcement officers.
  - b. Highway patrol officers during the probation period after their appointment must ride with an experienced motor carrier inspector one day per month.
  - c. State MCSAP agency offers training to county and local law enforcement.
  - d. Motor carrier's representatives participate in troopers training.
  - e. Training officers avail themselves to road troopers and check on their activities and progress.
  - f. Peer exchange among field personnel facilitates informal training through formal and informal activities (i.e., monthly meetings, special enforcement assignments, department newsletters, etc.)
  - g. Unofficial mentor program passes inspection techniques from the more experienced MCSAP officers to new officers.
- 

#### *List of contacts/resources*

- ☞ For information on Iowa's Training Manual, contact Mr. Kent Fleming at the Iowa FHWA-OMC Division, telephone (515) 233-7400 or Lt. Thomas Gabriel at the Iowa State Patrol, telephone (515) 281-4985.
- ☞ For information on Maryland's Fatigue Detection and Enforcement training, contact the Maryland State Police at (410) 974-2042, or the OMC National Training Center at (703) 235-0500.
- ☞ For information on Idaho's Distance Learning Training, contact Ms. Sandra DeKlotz, Idaho State Police (208) 884-7220; or the OMC National Training Center (703) 235-0500.
- ☞ For information about Nebraska State Patrol's roadside training of CR officers contact Lt. Gerald Krolikowski at (402) 471-0108.



# 5

## ***DATA ANALYSIS***

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There is a strong move at the OMC and State MCSAP agencies toward performance-based programs, where decisions and activities are supported by data analysis. Data analysis is an integral part of the HOS compliance program to identify problem areas and support informed management decisions.

The peer exchange team believes that proper analysis of data from all sources at the Federal and State levels (e.g., Safetynet, FARS, TIFA) is essential for effective program management, developing enforcement plans, targeting problem areas and problem carriers, and making the best use of available resources. Some of the examples of using data analysis observed during the peer exchange include:

- a. Use Safetynet data to examine safety trends (i.e., violations, crashes) to determine program direction by focusing on problem areas.
- b. Use Safetynet data for program management activities to identify the use of and need for resources, examine how program goals are met, and for personnel management, such as to ascertain officers' certification.
- c. Analyze crash data to identify crash locations and causation and develop appropriate enforcement and educational activities. Some States (e.g., Iowa and Utah) are using Geographical Information Systems for crash analysis, which provide location and attribute information on all crashes in the State.
- d. One agency is designated with the sole responsibility for Safetynet data collection and analysis, and assists in coordination efforts, information management, quality assurance, and timely uploads to FHWA.
- e. Improve crash causation analysis by including fatigue factors on crash investigation forms.
- f. Use technology (i.e., computers) to provide timely and accurate data.



# 6

## *TECHNOLOGY*

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Technology will continue to play a major role in enhancing motor carrier safety programs, increasing productivity, and bridging the transition to performance-based MCSAPs. Several national initiatives, such as the Intelligent Transportation System-Commercial Vehicle Operations, will impact the role of enforcement agencies as there is more use and exchange of information. These agencies should keep up-to-date on issues associated with new technology.

The discussion in this section is intended to highlight some of the technological tools observed during the peer exchange. For detailed information on the use of these systems, the reader should refer to other sections in this report, which cover HOS program elements which use technology, such as the roadside enforcement, the compliance review, and the data analysis chapters. It should also be noted that these practices will have overlapping roles in the overall motor carrier safety program in an agency. Ultimately, the management philosophy of the agency will determine the level and extent of technology use in a State's program because of the significant investments required for technology implementation.

The information in this chapter is arranged into three major sections: 1) computer equipment, 2) software applications, and 3) other equipment and resources.

### *6.1. Computers*

The use of computers is increasing rapidly, especially among field personnel at fixed and mobile sites. Computer systems facilitate the performance of officers and expedite the processing and access of information. Computer equipment is used for conducting inspections, entering data, uploading data, accessing information databases, and using specialized software. Typically, fixed site inspection stations are provided with desktop computers equipped with modems and printers. Mobile enforcement units and compliance review officers are provided with laptop computers, also equipped with modems, portable printers, and document scanners used to make computer records for information gathering during roadside inspections and compliance reviews. Some of these computers are pen-base, allowing officers to enter inspection data easily into the computer. The use of pen-base computers also assists States in meeting accuracy and time requirements for uploading to MCMIS.

- a. Desktop computers at fixed weigh and inspection sites, equipped with modems to connect to network, and printers.

- b. Laptop computers used for roadside inspections and compliance reviews, equipped with modems, portable printers.
- c. Document scanners used to make computer records for information gathering during roadside inspections and compliance reviews.
- d. Pen-base computers used for inspections, equipped with portable printers and modems.
- e. DATAMAXX, which checks driver's records on NLETS/NCIC at weigh stations (Nebraska).

## ***6.2. Software/Applications***

Several software programs are used by officers in the field and MCSAP managers to assist in their activities. A summary of these programs, classified by function is as follows:

- a. Routing software to verify distance, travel times, and speeds: PC Miler,<sup>®</sup> Automap,<sup>®</sup> Trip Maker.<sup>®</sup> (Wyoming provides PC Miler information through dispatcher for use by officers who do not have access to computers in the field).
- b. Support selection of vehicles and drivers for inspection using the Inspection Selection System (ISS) database at fixed inspection and weigh stations. The ISS assigns scores to motor carriers based on OMC's safety, inspection, and crash data.
- c. Colorado and Wyoming record vehicle and driver information on a network database that can be accessed by other locations within the State to verify driver record-of-duty. The data are collected from vehicles clearing their fixed site inspection and weigh facilities (ports-of-entry).
- d. Support roadside inspections and compliance reviews:  
 ASPEN computer inspection program  
 CDLIS (Commercial Driver License Information System)  
 MCREGIS for easy reference to FMCSR's and interpretations  
 CAPRI to assure consistency in compliance reviews.
- e. Support program management: Safetynet and other State data such as GIS-based crash databases, i.e., Accident Location and Analysis System (ALAS) used by the Iowa State Patrol and Arcview used in Utah.

## ***6.3. Equipment, Tools, and Resources***

This section describes some of the equipment used by field personnel to assist in HOS compliance. The information is arranged by type of equipment and application combined.

- a. Phone, cellular phone, fax machine, and CB radio used for information gathering to verify driver record-of-duty entries and exchange of information with other inspection sites.
- b. Radars and radar detector detectors used to select drivers for inspection.
- c. In-car video camera and VCR to document inspection (video and audio record) and collect information that could be used during an enforcement case or in court proceedings.
- d. Automatic License Plate Reader (MCSAP OOS Enforcement [MOOSE]) which remotely reads license plates of commercial vehicles and creates a computer record of the vehicle. The system can be used for inspection selections, gathering information and out-of-service verification (Minnesota and Wisconsin).
- e. State road maps, toll booth maps, and maps showing 100-air mile radius used to verify the driver's record-of-duty entries.
- f. Use of calculators and Log Checker,<sup>®</sup> which is a specially designed calculator with built in functions for log book calculations.

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#### *Additional Resources/Contacts*

- ☞ For information on MOOSE, contact Wisconsin State Patrol (608) 226-8128.
- ☞ For information on document scanners and DATAMAXX, contact Mr. Doug Douscheski, Nebraska State Patrol, (402) 471-0105.
- ☞ For information on the weigh stations 8-digit VIN database and Log Checker,<sup>®</sup> contact Sgt. John Pitzer, Colorado State Patrol, (303) 239-4656.
- ☞ For information on the computerized POE database system, contact Lt. Jess Oyler, Wyoming Highway Patrol (307) 777-4318.
- ☞ For information on in-vehicle Camcorders, contact the Iowa State Patrol at (515) 281-4985.
- ☞ For information on the Accident Location and Analysis System (ALAS), contact Lt. Thomas Gabriel, Iowa State Patrol, (515) 281-4985.
- ☞ For information on the use of Arcview for crash analysis, contact Mr. David Alder, Utah Department of Transportation (801) 965-4266.



# 7

## ***INDUSTRY OUTREACH***

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Industry outreach is an integral part of an effective HOS compliance program. Federal and State agencies share a common goal of improving safety with the motor carrier industry. That goal is achieved more effectively through strong partnerships between motor carriers and State and Federal agencies. Close cooperation and coordination result in productive exchanges of ideas and information that will result in voluntary compliance and contribute to safer highways.

Industry outreach activities are conducted at all levels of the organization. However, management philosophy will determine the extent of the relationship with the motor carrier industry. Management's approach should be to achieve compliance through effective education and enforcement. Proper training and interaction between field personnel and commercial drivers and motor carriers assure all opportunities of cooperation are realized.

This chapter discusses the numerous industry outreach examples observed during the State visits. The information is organized in three sections: education and training, partnership, and products (documents, brochures, etc).

### ***7.1. Education and Training***

Working with motor carrier associations, States have developed several mechanisms and activities to increase motor carriers' awareness of safety regulations and safe practices. These activities range from holding regular meetings with industry groups and participating in industry meetings, to answering special training and information requests by individual motor carriers. It should be emphasized that one of the basic avenues of educational outreach is the enforcement contact. Officers have the opportunity to use their contacts with commercial vehicle drivers on the roadside to inform them about safety and regulations. This method is effective and requires little additional resources. Some of the examples of educational and outreach programs observed during the peer exchange include, but are not limited to:

- a. Pennsylvania's Learning Increases Necessary Knowledge of Safety (LINKS) program as an industry, State, and Federal cooperative effort helps carriers comply with safety regulations. Carriers were invited to bring their records to neutral locations for review. Federal and State staff reviewed the carriers' records and assisted them with educational information to comply with safety regulations, emphasizing HOS regulations and proper log book entries.

- b. New York's around the clock Canadian Border Enforcement Operation on Level III inspections to educate the drivers about HOS rules and the differences in U.S. and Canadian laws. The project's purpose was to educate drivers, so no citations were issued. However, vehicles and drivers were put out of service.
- c. The Motor Carrier Association in Colorado is working with the Colorado State Patrol and the OMC to educate smaller carriers. Town meetings are held in areas of the State where small carriers operate to explain motor carrier safety regulations and answer their inquiries on how to meet these rules.
- d. Arizona motor carrier officers hold educational workshops for Mexican motor carriers and drivers to familiarize them with safety regulations. It helps carriers to become "in-compliance" by incorporating necessary steps over a reasonable period of time.
- e. The Pennsylvania DOT conducts a two-day shipper seminar to help bring the message to educate the shippers about the impact of unreasonable delivery demands on the carriers that cannot be legally met.
- f. The OMC in Pennsylvania conducts a Back to Basics course to educate motor carriers on HOS compliance.
- g. In Utah, as part of raising commercial drivers' awareness of fatigue issues, officers distribute brochures and pamphlets on fatigue and HOS rules to the drivers during roadside inspections and compliance reviews.
- h. Trucking Manuals are handed out to commercial drivers at inspection sites and mailed to motor carriers upon request. The manual contains information on motor carrier safety regulations, including HOS rules for interstate and intrastate motor carriers. The manual is a helpful resource to officers as well.
- i. Commercial drivers in New York and Utah were provided a pamphlet titled "Dying to Make Time?" explaining the risks of violating HOS rules.
- j. Warning letters are sent to the company after three roadside citations that resulted from violating motor carrier safety regulations.
- k. Video lending library at the Colorado State Patrol offers safety educational material to motor carriers.
- l. Informational pamphlets listing phone numbers for agencies (including surrounding States) and a summary of motor carrier safety regulations were provided to drivers in several States.
- m. Nebraska's Motor Carrier Association (MCA) is working to better reach smaller carriers and conducted Safety by Cooperative Partnership Education (SCOPE) seminars developed by the American Trucking Association (ATA), in partnership with FHWA-OMC.



- n. The Nebraska MCA is trying weekend seminars to accommodate small carriers' schedules.

## **7.2. Partnership**

A close and open relationship between motor carriers, State, and Federal agencies is demonstrated in many examples of partnerships across the States visited. This section provides some examples of these partnerships and highlights some of their achievements.

- a. Trucking Association assists in promoting training programs for drivers and small companies, and provides a Mentor Program for the "problem company."
- b. Pennsylvania's Pike Watch program improves highway safety for all motorists by alerting law enforcement officers to unsafe highway conditions and drivers.
- c. Regular meetings with industry representatives promote cooperation and provide insights to motor carriers and State agencies about critical safety issues.
- d. Maryland and Utah sponsor a Troopers and Truckers program (TNT) where the trooper rides with the trucker and the trucker rides with the trooper, nationally known as Law Enforcement and Truckers for Safety (LETS).
- e. Instructors from the motor carrier industry are used in troopers' training in Wyoming to discuss industry structure and different industry segments.
- f. The Motor Carrier Association in Colorado works with the legislature to ensure adequate resources are provided to the Colorado State Patrol.
- g. Commercial vehicle drivers in Utah signed a petition against relaxed exemptions on HOS rules for the construction industry because of the potential impact on safety, and successfully blocked the passage of the exemption.
- h. The Motor Carrier Association in North Dakota provides a Trooper of the Year award.
- i. The Nebraska State Patrol presents a plaque to the Truck Driver of the Month in cooperation with the Nebraska Motor Carrier Association.

